



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,251	01/11/2002	C. Richard Panico	99148.165	2287

23483 7590 03/03/2005

WILMER CUTLER PICKERING HALE AND DORR LLP
60 STATE STREET
BOSTON, MA 02109

EXAMINER

HARAN, JOHN T

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LD

Office Action Summary

Application No.

10/055,251

Applicant(s)

PANICO ET AL.

Examiner

John T. Haran

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,8,12,13,15,17,21-24,26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 26 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8,12,13,21-24,26 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/16/05 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 15, 17, 21-24 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 is indefinite because it is unclear if the first and second rings are part of the same pulsed lamp or different lamps. Clarification is requested. In addition the term "a single lamp enclosure" is indefinite because it is entirely unclear what is meant by this term. It is suggested to delete "and not part of a single lamp enclosure" from the claim.

Claim 17 is indefinite because it requires one of the rings to be closer to the DVD than the other and it appears this would only be possible if the rings are in different planes, however claim 15 states the rings are concentric. Concentric rings have the same center and are in the same plane so it is unclear how the rings can be both

Art Unit: 1733

concentric and in different planes so that one ring is closer to the DVD than the other.

Also it is unclear how the second ring can be positioned closer to the DVD than the second ring. It appears applicant intended to say the second ring is positioned closer to the DVD than the first ring.

Claim 21 recites the limitation "the DVD" in the last line. There is insufficient antecedent basis for this limitation in the claim. It appears that "the DVD" should be - - the workpiece - -. If this amendment is made then the dependency of claim 30 should be changed to claim 23.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040).

Yamada discloses a system comprising an optical disk (DVD) lying in a first plane and a pulsed lamp for directing pulsed light to the optical disk for processing the optical disk during manufacture wherein the lamp having a plurality of straight lamps or a lamp having a spiral shape (Column 17, lines 55-65).

Yamada is silent towards whether or not the spiral lamp is a flat spiral lamp and lies in a second plane parallel to the first plane, however such it is well known and conventional for spiral lamps to be flat and be in a plane parallel to the plane of a

Art Unit: 1733

workpiece, as shown for example in Panico (See Figure 3). One skilled in the art would have readily appreciated using a flat spiral lamp as is conventional as suggested in Panico. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a flat spiral lamp that lies in a second plane parallel to the first plane in the system of Yamada, as suggested in Panico.

Yamada teaches that the optical disk (DVD) has a central hole but is silent towards whether or not the reflector is contoured to provide less light to the center of the DVD where the hole is located and more light to the periphery of the DVD. One skilled in the art would have readily appreciated that the reflector reflects the uv light from the lamp to the DVD to cure the adhesive to bond the two optical substrates together to form the DVD. One skilled in the art would have readily recognized that there is no adhesive to cure at the center of the DVD as it has a hole there and that there is no need to waste excess energy applying pulsed light to that area. It would have been within the ordinary skill of the skilled artisan to contour the reflector to provide more light to the periphery of the DVD than the center of the DVD in order to more efficiently utilize the energy. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the reflector to be contoured to provide more light to the periphery of the DVD than to the center of the DVD in the system of Yamada.

Regarding claim 2, spiral lamps generally have at least two turns as shown for example in Panico (See Figure 3) and it would have been obvious to use such in the system of Yamada, as modified above.

Art Unit: 1733

Regarding claims 5 and 8, one skilled in the art would have readily appreciated having the lamp being smaller or larger than the DVD and having the reflector appropriately contoured to ensure uniform surface exposure to the pulsed light. It would have been obvious for the lamp to have a larger or smaller diameter than the DVD in the system of Yamada, as modified above.

6. Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040) as applied to claims 1, 2, 5 and 8 above, and further in view of Buazza (U.S. Patent 5,928,575).

Yamada is silent towards there being first and second rings in different planes that are parallel. Buazza teaches that flash lamps can be arranged in a plurality of shapes, including ring, helix, U, and linear and that the shapes are interchangeable (Column 44, lines 14-15). One skilled in the art would have readily appreciated using any of the known shapes for a flash lamp including a helix, which has a plurality of rings in different planes that are parallel in the lamp of Yamada. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lamp with a helix shape that has first and second rings in different planes that are parallel in the lamp on Yamada as is known in the art as suggested in Buazza.

Regarding claim 27, one skilled in the art would have readily appreciated that a helix lamp is an extended flat spiral lamp and that the rings would have different radii.

Art Unit: 1733

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal (U.S. Patent 6,030,653) in view of Panico (U.S. Patent 4,495,040).

Rosenthal is directed to a system comprising a pulsed lamp for positioning over a workpiece, the lamp having a spiral configuration about a central axis and extending from an inner radius spaced from the central axis to an outer axis and having at least one turn in a first plane perpendicular to the central axis wherein the inner radius and outer radius are spaced from the central axis so relatively less energy is provided to the workpiece along the central axis and relatively more energy is provide to portions of the workpiece between the inner and outer radius (See Figure 1 and Column 6, lines 4-17).

Rosenthal is silent towards having a reflector over the lamp that is contoured to control the energy provided to the workpiece, however such is well known and conventional in the art, as shown for example in Panico (See Figure 2, Column 3, lines 8-22). It would have been obvious to one of ordinary skill in the art to having a contoured reflector for controlling the energy provided to the workpiece in the system of Rosenthal as is well known and conventional in the art as shown for example in Panico.

Rosenthal also teaches an anode and cathode connection extending from the lamp to a power supply, one from the inner radius and the other from the outer radius (See Figure 1 and Column 6, lines 19-24), but is silent towards the connection extending in a direction perpendicular to the first plane through openings in a reflector, however such is a well known and conventional configuration, as shown for example in Panico (See Figures 2 and 11; Column 3, lines 8-22). One skilled in the art would have readily appreciated that the configuration of the connection is within the purview of one

Art Unit: 1733

skilled in the art and that there does not appear to be any criticality to the configuration. It would have been obvious to have the connections be perpendicular to the first plane in the system of Rosenthal and extend through openings in a reflector, as is conventional as suggested in Panico.

Regarding claim 22, Rosenthal teaches a workpiece, such as a food product (see Abstract).

8. Claims 23, 24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal (U.S. Patent 6,030,653) in view of Panico (U.S. Patent 4,495,040) as applied to claims 21 and 22 above, and further in view of Yamada et al (U.S. Patent 5,684,778).

Regarding claims 23 and 24, Rosenthal is silent towards the workpiece being a DVD or CD. Yamada et al teaches using a pulsed spiral lamp to apply light to the surface of an optical disk (DVD or CD) (Column 17, lines 55-65). One skilled in the art would have readily appreciated placing known workpieces under the pulsed lamp of Rosenthal. It would have been obvious for the workpiece to be a DVD or CD in the system of Rosenthal, as suggested in Yamada et al.

Regarding claim 30, it would have been obvious for the reflector to provide uniform energy to a DVD to ensure uniform curing of the adhesive in the system of Rosenthal, as modified above.

Response to Arguments

9. Applicant's arguments filed on 2/16/05 with regards to claims 1 and 21 have been fully considered but they are not persuasive.

Regarding claim 1, no hindsight is involved. One skilled in the art would have readily appreciated that the reflector reflects the uv light from the lamp to the DVD to cure the adhesive to bond the two optical substrates together to form the DVD. One skilled in the art would have readily recognized that there is no adhesive to cure at the center of the DVD as it has a hole there and that there is no need to waste excess energy applying pulsed light to that area. It would have been within the ordinary skill of the skilled artisan to contour the reflector to provide more light to the periphery of the DVD than the center of the DVD in order to more efficiently utilize the energy. There is ample motivation and expectation of success to have such a contoured reflector.

Regarding claim 21, the combination of the teachings of Rosenthal and Panico would result in a system with all the claimed limitations.

Allowable Subject Matter

10. Claims 12 and 26 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to suggest the claimed system for processing a DVD, particularly having a lamp with first and second rings that are separately energized and are in different planes with each plane be parallel to that of the DVD.

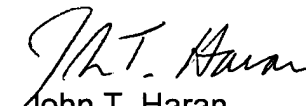
Art Unit: 1733

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(571) 272-1217**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John T. Haran
Examiner
Art Unit 1733